
EOSC-SYNERGY

EU DELIVERABLE: D1.4

Quality Plan

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Abstract:

This document describes the measures and procedures established to guarantee a smooth project execution and the quality of the project results including risk management.



I. Copyright Notice

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II. Delivery Slip

	Name	Partner/Activity	Date
From	Jorge Gomes	LIP/WP1	25/10/2019
Reviewed by	Moderator: Isabel Campos Reviewers: Ignacio Blanquer	CSIC/WP1 UPV/WP4	1/11/2019
Approved by	PMB	PO	18/11/2019

III. Document Log

Issue	Date	Comment	Author/Partner
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v3	19/10/2019	References, SQA aspects, formatting	Elisa Cauhé/EGI Jorge Gomes/LIP Miguel Ángel/CSIC
v4	4/11/2019	Address reviewers comments	Jorge Gomes/LIP

IV. List of Acronyms

Acronym	Description
CB	Collaboration Board
DoW	Description of Work
EC	European Commission
EOSC	European Open Science Cloud
FAIR	Findable Accessible Interoperable Reusable
IBERGRID	Iberian Distributed Computing Infrastructure
KPI	Key Performance Indicator
NREN	National Research and Education Network

MOOC	Massive Open Online Course
PDF	Portable Document Format
PMB	Project Management Board
PO	Project Office
TIB	Technical Integration Board
TOC	Table of Contents
URL	Uniform Resource Locator
SQA	Software Quality Assurance
WP	Work Package

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Executive Summary

EOSC-SYNERGY extends the EOSC coordination to nine participating countries by harmonizing policies and federating relevant national research e-Infrastructures, scientific data and thematic services, bridging the gap between national initiatives and EOSC.

The objective of this Quality Plan is to establish and enforce effective management and quality procedures for EOSC-SYNERGY that will result in high-quality outcomes.

The organizational structure of EOSC-SYNERGY comprises the Project Coordinator, Work Package leaders, Collaboration Board, Project Management Board, and Technical Integration Board. These bodies have been established and are fully operational. The governance of the consortium and the responsibilities related to the execution and monitoring of the project have been defined [Section 2].

The project internal communication channels and tools were established during the first project month [Section 3]. Face to face meetings of the individual Work Packages, cross Work Packages and project bodies took place at the project Kick-off Meeting. The meeting was organized in Santiago de Compostela from 23rd to 26th of September colocated with the IBERGRID 2019 [R1] conference.

Document management guidelines including the recommended structure, naming and review process have been defined in detail and established [Sections 4 and 5].

Several Key Performance Indicators have been identified and they will be closely monitored to assess the progress of the project towards the objectives [Section 6].

The project aims to push the EOSC state-of-the-art in software and services life-cycle through a quality-driven approach to services integration that will promote the convergence and alignment towards EOSC standards and best practices. To this end, the project is establishing quality criteria for services and developing tools to streamline the services integration. This is an important aspect of the project focus on quality [Section 7].

The management tools have been selected and are being used to assist in organizing and tracking the project execution [Section 8].

The risk management strategy has been defined and the set of risks and their mitigation measures has been expanded and detailed [Section 9 and Appendix I].

Finally, principles for gender equality handling have been defined [Section 10].

1. Introduction

1.1 Purpose

This document is a formal deliverable which records the status of the actions towards the development of an adequate implementation plan. This concerns the organisation of the EOSC-SYNERGY project, the definition of the management bodies, resources allocation, information channels and definition of the quality plan. The risk analysis is also described.

1.2 Document organization

This document is organized as follows:

- Section 2 describes the governance structure.
- Section 3 describes the communication channels.
- Section 4 describes the document management procedures.
- Section 5 describes the production of official documents together with its review process.
- Section 6 explains the projects metrics related to the different Key Performance Indicators.
- Section 7 describes the quality aspects related to software, services and data repositories.
- Section 8 describes the project management tools.
- Section 9 describes the risk management strategy.
- Section 10 refers to the gender action plan.
- Section 11 contains the reference table.
- Annex I contains the risk table and annex II the document templates.

2. Governance Structure

2.1 Project coordinator

The management of the Project is the responsibility of the Project Coordinator, who is in charge of the day-to-day execution of the project. The Project Coordinator will ensure the timely delivery of project objectives and deliverables by continuously monitoring the project progress against the planned activity.

The Project Coordinator identifies and tracks issues as well as proposes suitable corrective actions (i.e. resource reallocation, task force creation, etc.) that might require a formal decision by the consortium. The Project Coordinator will also act as the official point of contact between the Commission and the Beneficiaries.

The Project Coordinator, appointed by CSIC as lead partner, is Isabel Campos.

2.2 Work package leaders

The Work Package Leaders are responsible for the scientific and technical work in their respective Work Packages. This includes planning and control of all activities within the Work Package, preparation of deliverables and the collection of contributions from other partners participating in the respective Work Packages for internal and external reports. They are expected to raise critical issues to the PMB and to support the Project Coordinator in managing and organizing cross-work package relationships within the appropriate activity area. The Work Packages are divided into tasks coordinated by Task Leaders that assist the Work Package Leader in the organization and management of the WP activities.

Each Work Package meets regularly via teleconference. The periodicity is defined by each WP leader according to the workplan. Periodical all-hands events will provide opportunities for face-to-face meetings within and across WPs.

The project has six Work Packages has defined in Table 2.1.

WP	WP name	WP leader	WP deputy
WP1	Project Management and Exploitation	Isabel Campos (CSIC)	Jorge Gomes (LIP)
WP2	Capacity expansion at infrastructure level	Marcus Hardt (KIT)	Roksana Dobrzańska (ACK-CYFRONET)

WP3	Fostering Service Integration in EOSC	Jorge Gomes (LIP)	Pablo Orviz (CSIC)
WP4	Capacity Building for Thematic Services	Ignacio Blanquer (UPV)	Alberto Azevedo (LNEC)
WP5	Alignment of National policies and practices	Ludek Matyska (CESNET)	Matti Heikkurinen (EGI)
WP6	EOSC Skills development	Marcin Plociennik (PSNC)	Helen Clare (JISC)

Table 2.1: Work Package leaders and deputies

2.3 Collaboration Board

The Collaboration Board (CB) will be responsible for making decisions affecting the composition of the Consortium, resource allocation, for approving changes in the Description of Work (DoW), and for all other decisions having a direct legal or financial impact on project beneficiaries.

The CB meet for the first time at the project Kick-off Meeting. It is composed of one representative plus an alternate, per partner. The CB Chair selected among its members and appointed for a fixed time (12 months). The first appointed chair is Ladislav Hluchý from the consortium member IISAS.

The CB will meet at least twice a year, and at any time upon decision of the Project Coordinator or 50% of the Members of the CB.

2.4 Project Management Board

The Project Management Board (PMB) is responsible for making decisions affecting project strategy, including risk management, and for ensuring that the activities are effective and carried out according to the agreed schedule. It is also responsible for the quality of the project outcome, including deliverables.

The PMB is composed of the WP leaders plus their deputies and is chaired by the Project Coordinator (appointed by the lead partner).

The PMB will meet at least every month or at any time upon decision of the Project Coordinator or 50% of the members of the PMB. The meetings can be either face-to-face or via videoconference.

2.5 Technical Integration Board

The Technical Integration Board (TIB) has the role of advising the PMB in the decision making processes that affect integration and harmonization of infrastructures and services. The TIB will act as a cross-work-package technical body, with the remit of analysing the evolution of the technologies along the lifetime of the project, and provide informed advice to the PMB when selecting integration technologies for EOSC-synergy resources.

The members of the TIB will be chosen from the project consortium members. It will have a maximum of two technical experts for each relevant integration area (i.e. computing, storage, data repositories and thematic services).

2.6 Conflict resolution

At all levels within the project (i.e. in the Work Packages and management boards), decisions will be made preferably by consensus. Disputes within a Work Package that cannot be resolved by the Work Package leader should be referred to the Project Coordinator. Any occurrence that may compromise the project schedule will be reported immediately to the Project Coordinator that will take the appropriate measures, which may include an emergency CB meeting or teleconference as required. Each party involved in the issue must present a short document describing their respective understanding of the conflict that includes at least one proposed solution. The CB reviews the conflict documents and following the procedures of the CB, each member votes on one of the proposed solutions. The solution receiving the simple majority is implemented with the chairperson casting the tie-breaking vote as necessary.

2.7 Liaison with other EOSC projects

EOSC-SYNERGY complements on-going activities in other EOSC related projects liaising national bodies and infrastructures with other upcoming governance, data and national coordination projects. The EOSC-SYNERGY project will collaborate with other projects in the EOSC ecosystem either covering different geographic regions or specific topics aiming at further extending the coordination of national initiatives and harmonization of policies across Europe. The project contains a dedicated Work Package (WP5) dedicated to alignment of national policies and practices. Furthermore the project will build upon the EOSC recommendations on FAIR data practices delivered by the FAIRsFAIR project to foster the adoption of FAIR within the scope of the project. When applicable, the PMB will nominate experts to participate in EOSC work groups, task forces and other relevant bodies.

2.8 Project quality

The Task 1.2 *Project Quality and Risk Management* will assist the Project Coordinator in establish and enforce the quality procedures, including: the follow up of the KPIs, assess the work and achievements, review and follow up the deliverables and milestones, monitor the risks, ethics and gender equality and propose contingency plans, and verify that standards and procedures are applied.

3. Communication Channels

3.1 Project domain name

The project office has acquired the [eosc-synergy.eu](https://www.eosc-synergy.eu) domain which will be used to consolidate the most relevant services exposed to the public. The services under this domain name are currently the web site and project-specific mail accounts.

3.2 Tools for communication

The project has chosen a set of web-based tools for internal communication, which may be further expanded if needed. The initial set of tools includes:

- The project web site, which will be maintained by the dissemination team, it is being hosted by the consortium member LIP and is available at <https://www.eosc-synergy.eu>;
- For the organization of teleconferences, the project will use the Colibri Zoom [R2] service provided by the partner FCCN; As an alternative the videoconference service Jitsi [R3] will be also used if required;
- Workspaces for collaborative work on documents are provided through Google G Suite [R4];
- Project-specific mail accounts are hosted by the Spanish NREN RedIRIS;
- The project mailing lists are provided by the consortium member CSIC via its Sympa service [R5].

3.3 Mailing lists and email addresses

Several project-specific email addresses and mailing lists have been established, whose details in terms of composition and management are described in Table 3.1. Further mailing lists and email addresses can be created whenever needed upon request to the project office project-office@eosc-synergy.eu.

Address	Composition	Responsible/Contact
project-office@eosc-synergy.eu	Project Coordination team	Project Coordinator
communications@eosc-synergy.eu	Communications team handled by EGI.eu	Project Coordinator + Communications team
pmb@list.eosc-synergy.eu	Project Management Board (WP leaders and deputies)	Project Coordinator
cb@list.eosc-synergy.eu	Collaboration Board (Partner contact + one alternate)	Project Coordinator + CB Chair
wp1@list.eosc-synergy.eu	WorkPackage 1 team	WP1 coordinator
wp2@list.eosc-synergy.eu	WorkPackage 2 team	WP2 coordinator
wp3@list.eosc-synergy.eu	WorkPackage 3 team	WP3 coordinator
wp4@list.eosc-synergy.eu	WorkPackage 4 team	WP4 coordinator
wp5@list.eosc-synergy.eu	WorkPackage 5 team	WP5 coordinator
wp6@list.eosc-synergy.eu	WorkPackage 6 team	WP6 coordinator

Table 3.1: Mailing lists and email addresses

4. Document Management

All documents related to the project such as deliverables, milestones, presentations, dissemination materials and any other outcome of the project will be stored in a document repository managed by the Project Office. Sharing materials between project participants aiming at collaborative work will be handled through Google G Suite.

4.1 Document naming conventions

The documents will be stored and identified according to the following naming conventions:

EOSC-SYNERGY-<DOCUMENT IDENTIFIER>-V<VERSION NUMBER>

The fields to be completed their meaning and examples are described in Table 4.1.

DOCUMENT IDENTIFIER	<p>The identifier depends on the document type:</p> <ul style="list-style-type: none">• Dx.x for deliverables (e.g. D1.1)• Mx.x for milestones (e.g. M1.1)• WPx-minutes-YYYY-MM-DD for minutes (e.g. WP1-minutes-2019-09-12, PMB-minutes-2019-09-12, T1.2-minutes-2019-09-12)• WPx-docname for technical documents (e.g. WP3-development-status, CB-guidelines)
VERSION NUMBER	<p>Version number (e.g. 1, 2, 3, ...)</p>

Table 4.1: Document naming fields

4.2 Documents and their structure

Templates have been created for project documents and presentations. The templates enforce a set of information items to ensure coherence across documents, facilitate reading and ensure quality.

4.2.1 Document guidelines and limits

The following guidelines and limits apply to the EOSC-SYNERGY documents:

- Documents must be concise and easily readable;
- The size of the documents, particularly deliverables and milestones, is limited to 30 pages plus annexes, exceptions must be reported in advance and authorized by the PMB;
- The executive summary when present must provide a summarization of the content from which a reader can obtain the most important information without having to read the complete document;
- Figures and tables must have captions and must be referenced in the text.

4.2.2 Document delivery slip table

Each document will contain the following information:

- Logos of the project and European Commission;
- Name of the project (EOSC-SYNERGY or EOSC-Synergy use the form consistently);
- Project grant agreement number (857647);
- Title;
- Cover page table;
- Abstract;
- Dissemination level in the footer (PRIVATE, CONFIDENTIAL, PUBLIC);
- Copyright notice;
- Delivery slip table;
- Document log table.

Deliverables and other large or complex documents must also include:

- List of acronyms;
- Table of contents;
- Executive summary;
- Introduction;
- References;
- Annexes (when applicable).

4.2.3 Document cover page table

The cover page table is depicted in Figure 4.1 and includes:

- The document identifier composed of project name and identifier;
- Date of release (dd/mm/yyyy);
- Project source activity (WPx, PMB, CB, or any other body);
- Leader partner responsible for the document;
- Document status (DRAFT, PUBLIC);
- Dissemination level (PRIVATE, CONFIDENTIAL, PUBLIC);
- Document link (https://...).

Document Identifier:	EOSC-SYNERGY-DXX.XX
Date:	XX/XX/XXXX
Activity:	XXXX
Leader Partner:	XXXX
Document Status:	DRAFT/APPROVED
Dissemination Level:	PRIVATE/PUBLIC
Document Link:	https://...

Figure 4.1: Document cover page information

4.2.4 Document delivery slip table

The delivery slip table is depicted in Figure 4.2 and includes:

- In the first row (From) the first and last name of the person responsible for the document delivering it for review, the partner acronym and project activity (e.g. LIP/WP3) and the date of delivery;
- In the second row (reviewed by) the first and last names of the review moderator and reviewers, the partner acronym and project activity for each of them, and the date when the review was finished;
- For deliverables since they are approved by the PMB the third line (Approved by) must contain PMB in the name, PO in the Partner/Activity, and the date of approval. For other documents should contain the first and last name of the person or project body approving the document, partner acronym and project activity (e.g. LIP/WP3) and the date of approval.

	Name	Partner/Activity	Date
From			
Reviewed by	Moderator: Reviewers:		
Approved by			

Figure 4.2: Document delivery slip

4.2.5 Document log table

The document log table is depicted in Figure 4.3 and includes one row for each version of the document. The version number of the last row must match the version number in the document identifier as previously defined. Each row contains:

- The version of the document in the first column (Issue);
- The date when that version was finished in the second column (Date);
- Description of the document changes in the third column (Comment);
- Name of the authors and acronym of the partner in the last column (Author/Partner);
- The name of the authors can be in a short format (e.g. J. Gomes/LIP).

Issue	Date	Comment	Author/Partner

Figure 4.3: Document log

4.3 Presentations and their structure

Each presentation must include the following information in the first slide:

- Logos of the project and the European Union;
- Project grant agreement number (857647);
- Title of the presentation;
- Authors and project role or corresponding activity;
- Optional logos of the project partners.

The last slide should include:



- The URL for the project web site (www.eosc-synergy.eu);
- The contact address for further information such as the project communications e-mail address (communications@eosc-synergy.eu) or the author address.

5. Deliverables & review process

The project deliverables and milestones will follow a formal process from editing to review and publication.

5.1 Document editing

5.1.1 Document formats

The documents can be delivered for review in Open Office, or Microsoft Office formats or through Google G Suite, other formats must be previously agreed with the review moderator. The final format for submission to the European Commission must be PDF.

5.1.2 Responsible partner

Each deliverable has a project partner which is responsible for the document content and editing under the supervision of the corresponding WP leader and in cooperation with the relevant task leaders.

5.1.3 Work package leader supervision

The supervision of the WP leader includes technical aspects, conformity to requirements and quality aspects (coherence). In particular, the WP leader must verify that:

- The document is technically correct;
- The edition rules are respected: the format of the document is correct, the presentation, the identification, the title pages, the summary, the glossary, the annexes, etc;
- The content of the document is coherent itself and contains all the information necessary for its comprehension;
- The content of the document is compliant with other documents;
- If the document has to be incorporated into another document, the resulting document's coherence must be checked.

5.2 Document review

5.2.1 Review process

The Project Management (WP1) starts the review process, by nominating reviewers within the members of the consortium not directly related to the creation of the document. The reviewers will make an assessment of the points defined in the previous section. One of the reviewers will have the role of review moderator. The moderator collects the feedback from the reviewers and reports to the PMB on the review outcome which can be:

1. Approved with no changes or minor changes (e.g., typos);
2. Approved subjected to changes;
3. Not approved.

The follow-up procedure for each of the above cases will be:

1. The author(s) simply correct(s) the errors and issue(s) the document as approved;
2. The author(s) make(s) the necessary changes, which are proposed to the reviewers (this may be iterative, but must be achieved within the review calendar). Once all the changes are made and accepted the document is re-issued as approved;
3. The author(s) re-work(s) the document, which is then re-issued as a further draft that is again reviewed and subjected to the approval of the PMB. If needed the conflict resolution procedure can be applied.

5.2.2 Review calendar

The calendar for the production and revision of deliverables and milestones is defined in Table 5.1.

Time to submission	Status	Material available
6 weeks	TOC	Document created with Table of Contents.
4 weeks	Draft	Full draft is made available for preliminary content check by the reviewers, PMB and other interested parties.
2 weeks	Review	A review takes place, thus may require multiple iterations.
1 week	PMB review	Document is reviewed by the PMB.
Deadline	PO submits deliverable to the EC	Final version is available in the document repository.

Table 5.1: Document review calendar

Once the review process has been completed and approved by the PMB, the project office will produce a PDF of the document and upload this to the document repository and submit the material to the European Commission.

6. Project metrics and KPI

The project progress towards the objectives is monitored through the Key Performance Indicators (KPIs) and their related metrics as defined in Table 6.1. The quality control will be performed by WP1, which will collect KPIs and activity metrics to assess the progress and identify improvements.

Key Performance Indicator (KPI)	Target (Base/Stretch)
KPI 1 – Number of new data centres federated into EOSC	7/11
KPI 2 – Number of non-European resources added to EOSC	3/5
KPI 3 – Number of services integrated with the EOSC Portal	5/8
KPI 4 – Number of FAIR-compliant data collections	8/12
KPI 5 – Software Quality Assurance (SQA) mechanism in place	TRUE
KPI 6 – Number of services that went through SQA validation	10/20
KPI 7 – Collaboration in place with EOSC-related projects	4/8
KPI 8 – FAIR recommendations implemented	TRUE
KPI 9 – MOOC platform in production	TRUE
KPI 10 – Number of universities collaborating in skills development	6/12
KPI 11 – Number of tutorials uploaded to the platform	7/15
KPI 12 – Number of requests for online self-training	50/100
KPI 13 – Number of contributions coming from national roadmaps analysis	8/10
KPI 14 – Organization of meetings/workshops with national stakeholders	5/8
KPI 15 – Consolidated input documents to the EOSC Coordination structure	5/8

Table 6.1: Key Performance Indicators

7. Software and services Quality Assurance

The EOSC-SYNERGY project will push the EOSC state-of-the-art in software and services life-cycle through a quality-driven approach to services integration that will promote the convergence and alignment towards EOSC standards and best practices.

The project will integrate national infrastructure services, thematic services and data repositories within the EOSC platform so that they can be more easily found, accessed and used. Making these resources properly available in EOSC often requires specific knowledge, harmonization and integration. To support and foster the integration of these and other prospective resources, WP3 will implement a quality-driven approach aimed at streamlining the integration process and reward efforts towards quality. The objective is to provide incentives to service developers and service providers towards the adoption of processes and guidelines that ultimately contribute to improve the quality of the services and related software integration. This will be achieved by making the conformance and positive attributes of the services more visible. It is expected that such additional visibility will lead to increased adoption by developers and providers. Additionally, end-users, developers and providers will also benefit from having more systematic access to the quality attributes of the EOSC services and their underlying software integration. The detailed objectives of this strategy are:

- Manage the integration process of thematic and infrastructure services in EOSC, focusing on validation, delivery and deployment of software components. Thematic services will be integrated within WP4, while infrastructure services and repositories will be integrated within WP2.
- Consolidate a Software Sustainability baseline for service validation, harmonized with de-facto standards and specifications of software quality and security assessment.
- Rely on automation to speed up the validation and certification of the services software.
- Promote incentives for the adoption of quality practices by the definition and implementation of a badge issuing process to recognize the achievements in relation to the baseline recommendations.
- Develop a Software Quality Assurance (SQA) as-a-service to facilitate the development, delivery and integration of existing and prospective EOSC services.
- Foster the adoption and compliance of FAIR data practices by the scientific communities through the implementation of a mechanism to support FAIR recommendations.

Further technical details will be provided in month 10 through the deliverable D3.1 *Software Maturity baseline*, and in month 15 through the deliverable D3.2 *First prototype of Service Integration platform*.

7.1 Software and services maturity baseline

Through task 3.1 the project will consolidate a software maturity baseline for EOSC software and services that will contribute to improve quality, reliability, maturity, reusability, discoverability and transparency of the software, through the adoption of Software Quality Assurance (SQA) practices. The application of this concept, will ensure that service software components are open and secure (with static and dynamic security testing), with readable source code (with style standards) and compliant with the expected functionalities, both in terms of operational (with test-driven development) and behavioural requirements (with behaviour-driven testing). The use of software repositories and verification pipelines will enable new versions of the services to be continuously delivered and integrated in EOSC. The software baseline will be based on the Software Quality Assurance Baseline Criteria for Research Projects [R6] initially created in the INDIGO-DataCloud [R7] project and later adopted by other projects such as DEEP-Hybrid-DataCloud [R8] and eXtreme DataCloud [R9]. The services baseline will further extended the set of software quality criteria to the delivery of services.

7.2 Quality incentives

The incentives for the adoption of quality practices will be implemented through quality badges to be awarded in recognition of the achievements in relation to the baseline recommendations. The badges will promote transparency and traceability, as they will allow tracking down the quality achievements for future access and review. This assessment is also an incentive for the adoption of EOSC and FAIR practices as it appears as a symbol of trust and quality. The quality badges constitute an innovation towards the foundations for a future EOSC-ready stamp.

7.3 Integration platform

Task 3.2 will implement an EOSC service integration platform that will put into practice the quality baseline. The platform will rely, to the extent possible, on automation in order to be cost and time-efficient. For this purpose the platform will leverage Continuous Integration services, i.e. Jenkins [R10], the validation steps will be performed through Continuous Integration and Continuous Delivery pipelines. The platform will interact, through open APIs, with common, de-facto online software repositories. The automated deployment and on-demand provisioning of services will be evaluated, aiming to be prototyped and eventually integrated with the EOSC marketplace. The platform will be openly available as-a-service so that the validation of Software Maturity baseline can be triggered on demand for any given software release, and enabling external service providers to check the conformance while integrating their services in EOSC.

7.4 EOSC and FAIR data principles

Finally, the project will contribute to the uptake of EOSC FAIR data principles, building upon the EOSC recommendations on FAIR data practices delivered by the FAIRsFAIR project [R11]. The outcomes of FAIRsFAIR will be analysed and if deemed necessary further recommendations will be merged into a quality baseline. Similarly to the integration platform, a technical framework will be designed to support the recommended data practices operationally at the level of implementation, validation and monitoring.

8. Project Management Tools

To keep track of the internal progress the project uses Trello [R12] to support the project management, promote organization and foster communication among the Work Packages and Tasks. The board is depicted in Figure 8.1, it has been organized with list for each WP. Each WP general list contains cards for milestones, deliverables and actions. Each card contains detailed information about the work to be accomplished, the due date, associated team members, specific tasks to be accomplished, attachments and comments from the team members. These cards can be moved to the priority or ongoing lists as the project proceeds. The board enables a detailed yet global view of the ongoing work and its fulfilment.

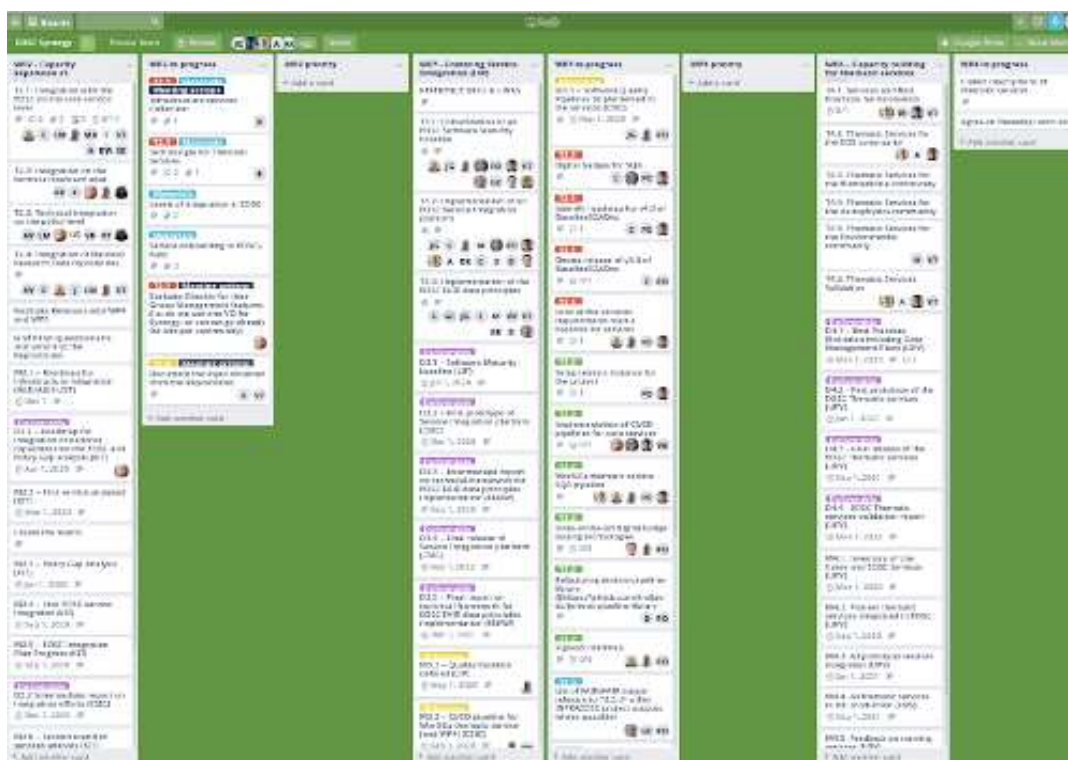


Table 8.1: Partial view of EOSC-SYNERGY Trello board

9. Risk management

A set of risks has been identified together with mitigation measures as described in the Annex I Table A1.1. The strategy to handle the risks will rely on the monitoring of the progress activities within each Work Package by the WP leaders. Together with the

assessment of the progress of each task, WP leaders have the responsibility of periodically checking the status and impact of the risks relevant to their Work Package and apply the appropriate measures to minimize their impact. This systematic risk identification and evaluation will take place during the WP weekly/biweekly meetings.

The status of each risk will also be monitored by the PMB, which will rely on the information provided by the Work Package leaders and will perform a high-level and cross-WP analysis of the risks. This will ensure both an independent and a global assessment.

The PMB will evaluate the risks so that appropriate countermeasures can be defined. If major changes are needed the PMB will define a proposal for a contingency plan, which will be submitted to the CB for approval.

10. Gender Issues

The project management is completely engaged with promoting a working atmosphere free of any type of discrimination for gender reasons. In this sense no issues were identified during the proposal preparation time nor during the initial stage of the project.

The Project Management will make sure that the selection of profiles to participate in the different bodies of the project will take place by evaluation exclusively the relative merits of the candidates from a curricular point of view.

11. References

R1	IBERGRID 2019: https://wibergrid.lip.pt/site/2019-santiago-de-compostela/
R2	FCCN Colibri Zoom videoconference: https://videoconf-colibri.zoom.us
R3	Jitsi videoconference: https://meet.jit.si
R4	Google G Suite: https://gsuite.google.com/
R5	CSIC internal mailing lists service: https://listas.csic.es
R6	A set of Common Software Quality Assurance Baseline Criteria for Research Projects: https://github.com/indigo-dc/sqa-baseline
R7	INDIGO-DataCloud H2020 project: https://www.indigo-datacloud.eu/
R8	DEEP-Hybrid-DataCloud H2020 project: https://deep-hybrid-datacloud.eu/
R9	eXtreme DataCloud H2020 project: http://www.extreme-datacloud.eu/
R10	Jenkins continuous integration software: https://jenkins.io/
R11	FAIRsFAIR H2020 project: https://www.fairsfair.eu/
R12	Trello project management service: https://trello.com

Annex I - Risk table

Risk	Risk description	WPs	Risk mitigation measures
R1	Name: Fail to attract new resource providers to EOSC Probability: Low Impact: Lower regional capacity in EOSC.	WP2	Dissemination at regional/national level targeting digital infrastructures; bridging with the resource providers. Provide training to infrastructure managers to overcome integration issues.
R2	Name: Lack of opportunities or willingness to integrate common services; federation & collaboration services vertically or with added value and thematic services Probability: Medium Impact: Less regional services available in EOSC.	WP2 WP4	Dissemination at national level. Bridging with user communities and resource providers. Facilitate integration processes. Reward service integration through a quality-based approach.
R3	Name: Issues with dependencies on current EOSC services supported by other projects. Probability: Medium Impact: Delays in service integration, operational issues.	WP2 WP4	Close coordination with ongoing EOSC related projects. As national infrastructures contribute to foster stability of the EOSC core functions. Make the EOSC-SYNERGY software and service quality assurance developments available to other projects.
R4	Name: Lack of engagement with the proposed Software Quality procedures Probability: Medium Impact: Lower project impact, fewer opportunities to boost EOSC services quality and adoption.	WP3	Targeted dissemination towards open source communities and promoting software quality and best practices.
R5	Name: New services fail to attract new users beyond the original target. Probability: Low/Medium Impact: Lower project impact, lower EOSC uptake and visibility.	WP2 WP4	The services proposed for integration in EOSC are developed and backed by the relevant user communities. Target training and dissemination activities to increase adoption.
R6	Name: Difficulties in establishing constructive interactions with EOSC-	WP1 WP5	Organize concertation meetings with the support of the EOSC Executive Board and the EC.

	related projects Probability: Medium Impact: Lower project impact. lower EOSC uptake and visibility.		
R7	Name: Withdrawal of key partners, experts or developers including BREXIT Probability: Medium/High Impact: Key competence of the project could be lost. Outcomes associated with the withdrawing partner might not be delivered. Withdrawal of a country will reduce the regional scope.	ALL	The work will be taken over by personnel from the same or other partners involved in the relevant activities and having similar expertise. Withdrawal of a key partner might cause delays and result in partial outcomes, but the main goals will be completed. Each key partner that is critical for a specific activity has an alternative partner with enough knowledge to overtake its role.
R8	Name: Effort needed is underestimated Probability: Low/Medium Impact: Execution schedule and completion of objectives can be affected.	ALL	The partners' expertise from previous projects, ensures proper estimation of effort. During the first phase of the project, each WP is carefully planning the activities and the PMs allocated matching them to the available resources. The activities will be closely monitored and deviations will be promptly addressed.
R9	Name: Insufficient development of the exploitation strategy Probability: Low Impact: Exploitation goals might not be reached.	WP1	The project will prepare an exploitation plan that will be evaluated and updated along the project development. Exploitable results and related activities will be monitored to identify the need for further actions.
R10	Name: Failing to timely deliver a component or result. Probability: Low/Medium Impact: Delay in the project execution schedule.	WP2 WP3 WP4 WP6	Delivery of components and results will be closely and continuously monitored, using timeline, milestones and deadlines in order to ensure that the project is able to deliver them in time. Based on this monitoring, effort might be moved across WPs or tasks in order to meet the objectives.
R11	Name: Project outcomes are not adopted. Probability: Medium Impact: Decrease in project impact, less alignment in EOSC.	ALL	The project already includes key resource and infrastructure providers that are committed to the solutions foreseen to be implemented or endorsed by the project. Through the exploitation activities the adoption and interest will be monitored and targeted dissemination, training and/or concertation actions performed.

R12	Name: User requirements for services are not complete. Probability: Medium Impact: Services may not meet user expectations, services integration or deployment might fail.	WP2 WP3 WP4	The services proposed for integration in EOSC are being developed and backed by the user communities to match their requirements. The partners include both the user communities and resource providers with experience in service integration. The integration and related developments will be closely monitored to identify and fix the gaps.
R13	Name: Integration of services into EOSC is postponed due to unforeseen infrastructure requirements or lack of expertise. Probability: Low Impact: Delays in the service commissioning.		The project includes key resource and infrastructure providers that are committed to the services and solutions to be provided. The partners have extensive experience in service integration. The project will develop a quality driven approach to facilitate service integration and commissioning.
R14	Name: Software developers within the project not fully complying with the proposed Software Quality Assurance (SQA) process. Probability: Low Impact: Lower software quality, increased operational and maintenance costs, security vulnerabilities.	WP3 WP4	The SQA procedures are based on the INDIGO-DC software quality baseline, which has been successfully applied in previous projects. Most software developers within the project are already familiar with the baseline concepts. WP3 will work closely with WP4 to promote and assist in the adoption of the baseline and related tools.
R15	Name: Delay in services software release with respect to previously agreed schedule. Probability: Medium Impact: Delay in the adoption of the service and/or access to bug fixes.	WP3 WP4	Partners have expertise in services integration, software quality assurance and services deployment and operation. The evolution of the developments and integration will be carefully monitored and the effort adjusted.
R16	Name: Lack of engagement of National Authorities Probability: Medium Impact: Incomplete assessment, difficulties in harmonization, difficulties in EOSC uptake.	WP5	Liaise with EOSC governance bodies and with other countries already engaged, in a coordinated effort to reach out to national authorities. Exploit the national links between the partners and their funding authorities or governments.
R17	Name: Low adoption of the online training platform and self-training infrastructure. Probability: Low Impact: Decrease in project	WP6	Improve the dissemination strategies towards concrete stakeholder groups; contribute to create more appealing training materials. Engage with academic institutions to embed skills and resources

	impact, slower EOSC uptake.		and create guidelines to publicize and improve the visibility of training materials.
R18	Name: Lack of engagement by academic institutions. Probability: Low/Medium Impact: Decrease of available materials and their quality, less impact.	WP6	The partners are directly involved with academic institutions and have among their staff researchers that are experts in the fields targeted by the training and/or also teach in universities. Improve dissemination and promote the advantages of the platform.
R19	Name: Lack of engagement towards FAIR data practices Probability: Medium Impact: Less impact, less repositories easily usable by the community.	WP2 WP3 WP4	Dissemination of the FAIR data practices raising awareness via the project communication channels, creating recommendations and a quality baseline for data repositories, provide tools to assess FAIR compliance, provide real repository examples.

Table A1.1: Risks and mitigation measures

Annex II - Document template

A generic document template has been designed and follows in the coming pages.

EOSC-SYNERGY

EU DELIVERABLE: Dx.x

Title goes here

Document Identifier:	EOSC-SYNERGY-Dx.x
Date:	dd/mm/yyyy
Activity:	WPx
Lead Partner:	XXX
Document Status:	DRAFT/APPROVED
Dissemination Level:	PUBLIC/PRIVATE/CONFIDENTIAL
Document Link:	http://...

Abstract:

This is the EOSC-SYNERGY template for documents ... Text ... text ... text ...



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II. Delivery Slip

	Name	Partner/Activity	Date
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Reviewed by	Moderator: Reviewers:		
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III. Document Log

Issue	Date	Comment	Author/Partner
v1	dd/mm/yyyy	TOC and initial draft version	xxx/XXX
v2	dd/mm/yyyy	Full draft ...	xxx/XXX
v3			

IV. List of Acronyms

Acronym	Description
EOSC	European Open Science Cloud
WP	Work Package

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Executive Summary

EOSC-SYNERGY extends the EOSC coordination to nine participating countries by harmonizing policies and federating relevant national research e-Infrastructures, scientific data and thematic services, bridging the gap between national initiatives and EOSC.

This document ...

1. Introduction

1.1 Purpose

This document is a formal deliverable which records the status of the actions towards the development of an adequate implementation plan. This concerns ...

1.2 Document organization

This document is organized as follows:

- Section 2 describes ...
- Section 3 describes ...
- Section 4 describes ...
- ...
- Annex I contains ... and annex II the ...

2. Section title

Text ...

2.1 Subsection title

Text ...

2.2 Subsection title

Text ... these are defined in table 2.1.

xx	xx	xx	xx

Table 2.1: Table caption

2.3 Subsection

Text ...

3. Section

Text ...

3.1 Subsection

Text ...

3.2 Subsection

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- xxx
- xxx
- xxx

3.3 Subsection

Text ...

4. Section

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4.1 Subsection

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4.2 Subsection

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4.2.1 SubSubsection

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- Text ...;
- Text ...;
- Text

4.2.2 SubSubsection

Text ...

4.2.3 SubSubsection

Text ... is depicted in Figure 4.1

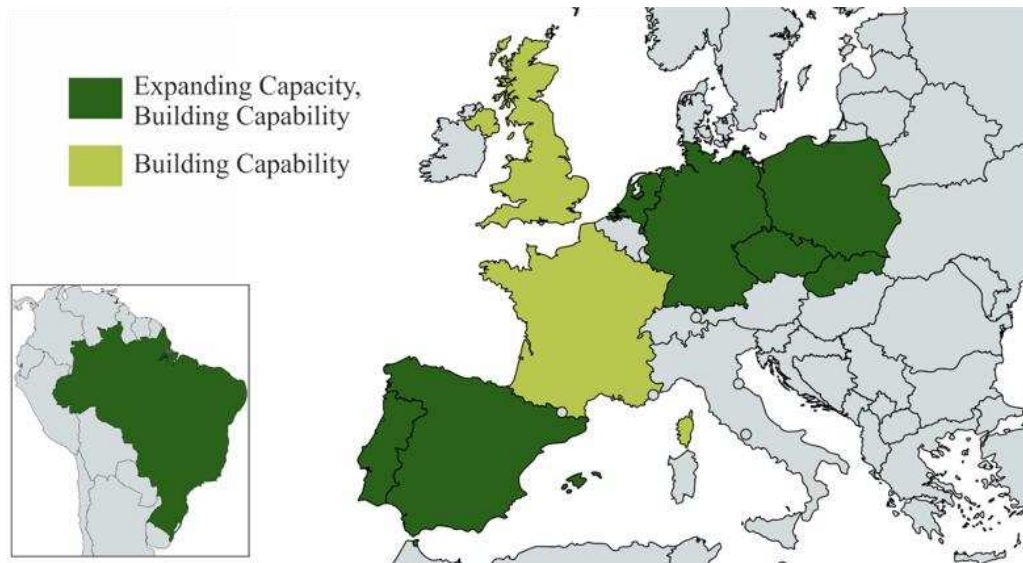


Figure 4.1: Figure caption

4.2.4 SubSubsection

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4.3 Subsection

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5. Section

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5.1 Subsection

5.1.1 SubSubsection

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6. Section

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7.3 Subsection

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8. Section

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9. References

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R1	Definition ...
R2	Definition ...
R3	Definition ...

Annex I - Title

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Table A1.1: Table caption

Annex II - Title

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Table A2.1: Table caption